

REMARKS

This paper is responsive to the Office Action mailed December 10, 2008, in the above-captioned application. Claims 7, 8, 10, 11 and 34-38 have been amended, claims 3, 6, 9 and 32-33 have been canceled without prejudice or disclaimer, and new claim 39 has been added. No new matter has been added. Claims 7, 8, 10, 11, 13 and 34-39 are pending in this application. For the reasons discussed below, prompt allowance of the pending claims is respectfully requested.

Rejection under 35 U.S.C. § 103(a)

Claims 1, 3-11, 13 and 32-35 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent 6,019,745 (Gray) as modified by U.S. Patent 3,418,456 (Hamisch et al.) and/or U.S. Patent 3,585,367 (Humbarger).

Gray describes a syringe/pump combination in which syringe information may be obtained by either (1) a data carrier device (2c) provided on the finger grip 2 of the syringe that emits data about the syringe upon activation by an activation means in the pump (Col. 2, lines 20-26 and 43-47, and col. 5, lines 47-52) or (2) detecting the presence or absence of magnetic ink bars 20 provided as a bar code on the syringe label 18 (Col. 6, lines 48-67).

Hamisch and Humbarger each describe a portable merchandise tag reader that conducts an optical circular scan of the pattern printed on the tag using a pair of circularly movable scanning phototransducers to obtain information about the tagged item. (see, e.g., Humbarger at col. 4, lines 10-21 and 41-51; Hamisch at col. 5, lines 25-31).

The Pending Claims are Not Obvious Over the Applied References

In contrast to the present invention as recited in amended claims 35-37 and new claim 39, none of the applied references teaches or suggests an ampoule having distal end with a surface perpendicular to a longitudinal axis of the ampoule wherein at least two recognition elements are each positioned in one of a plurality of predetermined positions on a radius extending radially

about the longitudinal axis on the perpendicular surface of the ampoule, and wherein the recognition elements are positioned asymmetrically along the radius such that **detection of the positions of the at least two recognition elements enables recognition of the ampoule.**

Neither Gray, nor Hamisch nor Humbarger describes or suggests the detection of the position of recognition elements to enable recognition of an ampoule. Gray teaches instead the use of a data carrier device 2c, which may be positioned on the finger grip 2 of the syringe or in other locations on the syringe, such as on a label or embedded in the syringe material. See Col. 11, lines 38-43. The data carrier device 2c is electrically or magnetically operable “to emit data it is carrying in response to activation by a suitable field applied by an external means” (col. 2, lines 25-26) and is operable “irrespective of the rotational alignment of the syringe.” Col. 4, lines 56-57. Thus, the position of the data carrier device 2c is not used to recognize the syringe.

Gray also discloses the use of a magnetic bar code provided on a label positioned on the side of the syringe, wherein Hall effect devices mounted within electromagnets are used to sense the presence and absence of magnetic bars 20 on the syringe (see FIG. 4) “to denote the drug type and concentration.” However, this embodiment also does not teach or suggest the claimed invention in which recognition elements are positioned asymmetrically along a radius on the distal surface of an ampoule such that detection of the positions of the recognition elements enables recognition of the ampoule. Detection of the presence or absence of magnetic bars does not teach or suggest the use of the position of asymmetrically located recognition elements on the distal surface of an ampoule as recited in claims 35-37 and 39. Thus, Gray does not teach or suggest the present invention as recited in these claims.

Additionally, the Hamisch and Humbarger references do not remedy the deficiencies of Gray because neither reference discloses or suggests a system in which the asymmetrical position of recognition elements is used to recognize an item. Instead, both Hamisch and Humbarger describe portable scanning devices that conduct an optical circular scan of printed information, such a circular bar code on circular tags (see Humbarger Fig. 2 and Hamisch Fig. 3). Neither device detects positions of recognition elements on an item or tag to enable recognition of an item. Thus, as with Gray, these references do not teach or suggest the invention as recited in amended claims 35-37 and new claim 39.

Additionally, Gray teaches away from the modification asserted by the Examiner because Gray teaches that one advantage of its design is that “relative movement need not be taking place between the data carrier and the receiving means for the data to be read.” Col. 3, lines 66-67. In contrast, the Hamisch and Hamburger devices require rotation to scan the circular tags (see, e.g., Hamburger at col. 4, lines 10-21 and 41-51, and col. 6, lines 29-35; Hamisch at col. 5, lines 25-31). Therefore, equipping the Gray syringe with a circular bar code and bar code reader as suggested by the Examiner would defeat one of the express advantages of the Gray device. Gray also expressly dismisses the Examiner’s asserted combination, distinguishing optical bar code systems as needing “to be accurately positioned rotationally to align with the reader” and further stating that “an optical bar code system may be capable of being misused, and may not provide the required safety.” Col. 4, lines 6-10. Consequently, there would be no motivation for one of skill in the art to attempt the combination asserted by the Examiner.

For these reasons, amended claims 35-37 and new claim 39 are believed to be patentable over the applied combination of Gray, Hamburger and Hamisch.

Additionally, claim 37 recites a reference recognition element positioned along a second radius extending circumferentially on the perpendicular surface about the longitudinal axis, wherein the reference recognition element enables detection of the positions of the recognition elements while the ampoule is rotated. None of the asserted references teaches or suggests the use of the recited reference recognition element in conjunction with recognition elements as recited in amended claim 37, and claim 37 is therefore believed to be patentable over the applied references for this additional reason.

Claims 7, 8, 10, 11, 13, and 34 depend from amended claim 36 and are believed to be patentable over the asserted combination of references for at least those reasons set forth above with respect to amended claim 36.

Amended claims 7, 8 and 34 also recite one or more reference recognition elements and are believed to be allowable for the additional reasons discussed above with reference to amended claim 37.

Claim 38 depends from amended claim 37 and is believed to be patentable over the applied combination of references for at least those reasons set forth above with respect to amended claim 37.

Conclusion

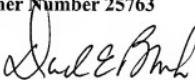
This paper is being submitted on or before March 10, 2009, and no additional fees should be due. However, the Commissioner is authorized to charge any additional fees, including extension fees or other relief which may be required, or credit any overpayment and notify us of same, to Deposit Account No. 04-1420.

The application now stands in allowable form, and reconsideration and allowance are respectfully requested.

Respectfully submitted,

DORSEY & WHITNEY LLP
Customer Number 25763

Date: March 9, 2009

By: 
David E. Bruhn, Reg. No. 36,762
(612) 340-6317